

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS FO Box 1430 Alexandria, Virginia 22313-1450 www.tepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,207	01/22/2004	Masaya Oi	2018-835	2348
23117 7590 09/24/2098 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER	
			VU, TUAN A	
ARLINGTON	, VA 22203		ART UNIT	PAPER NUMBER
			2193	
			MAIL DATE	DELIVERY MODE
			09/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/761,207 OI ET AL. Office Action Summary Examiner Art Unit TUAN A. VU 2193 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 18 July 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-60 is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-60 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (FTO/S5/0E)
 Paper No(s)/Mail Date _______.

Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.

6) Other:

5) Notice of Informal Patent Application

Art Unit: 2193

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 7/18/08.

As indicated in Applicant's response, claims 1-4, 8-48 have been amended, and claims 49-60 added. Claims 1-60 are pending in the office action.

Claims Rejections - 35 USC § 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 52-60 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, claims 52-60 recite 'deleting the specifier' or 'deletes the specifier', the specifier being 'specifier of the selected specific part'. The Disclosure describes Figure 5 in terms of deleting information, blocks (end block, start block) of a model (model 3), i.e. a part represented as a *subsystem* of a large model (model 3), based on a acquired selection information, but nowhere is there a utility in place that explicitly <u>deletes</u> a 'specifier of the selected specific part' as recited. Not a single portion in the Specifications associates this 'specifier' concept with an explicit deletion capability to just 'delete' this *specifier* exactly as recited (of a selected specific part). The inventor is not deemed in possession of this limitation at

Art Unit: 2193

the time the invention was made. For the sake of prosecution, the 'deleting/deletes' limitation is treated as though it were for deleting non selected parts.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action.

A person shall be entitled to a patent unless -

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert Hanselmann, 'Automotive Control: From Concept to Experiment to Product', IEEE International Symposium on Computer-Aided Control System Design, Proceedings of September 1996; pp. 129-134(hereinafter Hanselmann) in view of APA (Admitted Prior Art: Background of Invention, pg. 3).

As per claim 1, Hanselmann discloses a code generation apparatus to generate a source code using a model containing at least two specific parts (e.g. Fig. 2, 4, 5 – Note: parts of a ECU reads on at least two parts), either of which is only used in a system to which the generated source code is adapted, the apparatus comprising:

model acquisition means for acquiring the model (e.g. Step 1: m-file format ... block-diagram format - pg. 129, R col.; Fig. 4-5 – Note: theoretical model as input with block-diagram format describing ECU reads on having specific parts therefor – see Toyota, injector, crankshaft, actuators – L col. middle, pg. 131) having the specific parts;

Art Unit: 2193

information acquisition means for acquiring information, from a source external to the simulation apparatus (block libraries, textual specifications pg. 129, R col; drag-and-dropped onto the window - pg 132, 2nd para, R col – Note: drag and drop and importing of data from external files reads on selected information obtained by information acquisition means) capable of selection of a specific part among specific parts (step 1: block diagram format ...step 4: textual specifications – pg. 129, R col; m-file – Fig. 7; step 4: block libraries, textual specifications – Note: diagram files or m-files put into MATLAB reads into the acquisition engine – Fig. 2 - reads on outside of the code generation means; drag-and-dropped onto the window - pg 132, 2nd para, R col – Note: inputting via user's mouse drag/drop reads on source external to the code generation apparatus) using a corresponding part specifier (Note: selected items on the interface for prototyping a ECU by means of reading files or drag-and-drop effectuated in the SIMULINK runtime -see Fig. 2 - reads on selection by a part specifier based on acquisition of data, libraries or specifications and input events);

deletion and generation means for generating the source code (step 5: C code - pg. 129, R; Matlab → Simulink → C coded model → Object code - Figure 1, pg. 130) from an intermediate model (e.g. step 4: drag-and-drop, pg. 129, Fig. 2; drag-and-dropped onto the window - pg 132, 2nd para, R col - Note: inputting via user's mouse drag/drop and text specifications and libraries reads on deleting to yield a intermediate type model for enabling to simulation code generation - Figure 1; steps 6-8, pg. 129-130 - Note: selected items on the interface for prototyping a ECU by means of repetitive acquiring, loading back, reading files or drag-and-drop effectuated in the SIMULINK runtime -see Fig. 2 - reads on selected part by a part specifier for simulating data

Art Unit: 2193

loaded onto *intermediate model*, i.e. a preliminary prototype – *Prototyping*: pg. 130, sec 3, R col.),

the intermediate model (e.g. Fig. 2; preliminary control design... SIMULINK block, step 4, pg. 129, R -- Note: preliminary Simulink prototype block for specifying parts reads on intermediate model) containing only a selected specific part selected from the plurality of specific parts and not containing any other specific part other than the selected specific part (Note: part selected by drag and drop reads on not containing other parts); and

a machine readable storage medium for storing the generated source code (see above).

Hanselmann does not explicitly disclose selection information acquisition means for acquiring selection information, from a source external to the simulation apparatus, so that the intermediate model is generated from the model acquisition means based on the selection information acquired by said selection information means such that the intermediate model would contain a selected specific part based on that said selection information and not parts other than said selected part.

Hanselmann discloses varieties of contexts by which a ECU can be specified, instantiated as a simulated model based on a particular hardware and automotive requirements (see Introduction, pg 129 L col; Toyota ECU – middle L pg. 131) such that look up logic for reuse whereby a ECU prototype can be fine-tuned then finalized (table look ups ...model base control; adaptation -pg. 134, L col middle) according to automotive control needs or microprocessor availability and brand of car manufacturer (Chrysler - see 8, pg 134); hence the variety of hardware, car model, and ECU type being reusable, environment and industrial applicability for car controls system (bottom R pg. 131 to pg. 132, top L) suggests a selection of a particular

Art Unit: 2193

engine or combustion or application global type criteria. APA teaches plurality of automotive engines and destination countries for a manufacturer to deliver a specific model (see V6, V8, destination countries, Specifications; pg. 3 top). Thus, based on variety of car makers as set forth in APA, including engines, microchip speed, automotive controller size and timing/combustion specifications as construed in the automotive industry and Microprocessor hardware, and human decision as exactly what is required for manufacturing and test implementation, it would have been obvious for one skill in the art at the time the invention was made to implement the Simulink model framework by Hanselmann so that a human requirement (e.g. a selection criteria from a automotive developer or manufacturer's requirement) regarding a automotive or hardware selection or type (e.g. engine size, country destination) be acquired (from outside the simulation engine at the onset) prior to the reaching the stage of SIMULINK prototyping and repetitive simulation runs thereof (loop, feedback, steps 4-5, 7-8, pg. 129-130; sec 3, pg. 130, R), whereby using the drag-and-drop and finetuning of the prototype would be in accordance with this selection information in that only the correct parts and only those required by this external selection would compose the Simulink block diagram (Fig. 2) to the effect to simulate and meet just results as endeavor by the repeated stages of testing to capture outputs or meet restrictions in hardware capabilities for that particular selection, because of the huge difficulties in contemplating complex and numerous factors in the automotive industry (see Introduction: requirements ... Control Prototyping, pg. 129, L; modern automotive control - bottom R pg. 131 to pg. 132, top L) hence 'obviating useless development' work (bottom L pg. 130) and achieving fast improvement.

Art Unit: 2193

As per claim 2, Hanselmann discloses wherein at least one part specifier includes a part specification block (e.g. Fig. 4-5 in light of step 1, step 2, step 4-6, pg. 129, L col.) which encloses the specific part of the model (e.g. *Toyota* – section 3, The Virtual ECU, pg. 131 – Note: Simulink-based to address verification of requirements of parameters for Toyota's ECU reads on part including a model), and (by virtue of the obviousness rationale as set forth in claim 1) wherein the selection information acquisition means acquires the selection information indicating at least one of selection and deletion of the specific part using the part specification block (e.g. step 5, R col., pg. 129; Fig. 1, pg. 130; *step 2 and 3 may be repeated many times* – pg. 130, bottom L col. – Note: improving via readjusting of blocks in *Simulink* tool reads on selection/deletion to improve upon initial or preliminary model – see step 6-8, pg. 129-130; backward arrows in Fig. 1).

As per claim 3, Hanselmann discloses wherein at least one part specifier includes attribute information (e.g. parameters – Fig. 1; Fig. 2, 4, 5) that is included in one of the the specific part of the model.

As per claim 4, Hanselmann discloses:

correlative information acquisition means for acquiring correlative information indicating correlation (e.g. section 3, RCP requirements, Virtual ECU, pg. 130-131; Fig. 5; Real-Time Interface, dSPACE hardware – Fig. 1, pg. 130) between part specifiers respectively specifying the specific parts of the model acquired by the model acquisition means and the selection information acquired by the selection information acquisition means (e.g. Fig. 3-5 – Note: prototyping or performing real-time Hw/Sw mapping based on requirements and hardware limitations and implementation constraints reads on correlating parts specifications and

Art Unit: 2193

SIMULINK data blocks setting), wherein the deletion and generation means generates the source code (section 4, pg. 132) from the certain model that is generated using the model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means and the correlative information acquired by the correlative information acquisition means (steps 5-7, pg. 130-131; *Parameters Tuning*, section 5, pg. 132-133).

As per claims 5, 7, Hanselmann discloses information about a model type (*Toyota ECU commercial microcontroller* – section 3, The Virtual ECU, pg. 131; DEC Alpha AXP,

TMS320C40 -section 6, pg. 133 – Note: Simulink-based to address verification of requirements of parameters for Toyota's ECU reads on part including a model) relevant to the source code generated by the deletion and generation means (refer to claim 4); wherein the selection information includes information about an intended use (section 7, pg. 133; section 8, pg. 134 – Note: modeling and implementing test/prototyping using SIMULINK for a code simulating a ECU for Toyota or Chrysler reads on requirements to fulfill via test for ECU application) relevant to the source code generated by the deletion and generation means.

As per claim 6, Hanselmann does not explicitly disclose that the selection information includes information about a destination country relevant to the source code generated by the deletion and generation means. However, the automotive concept for building specific controller in compliance with the requirements or regulations of a environment or geographical settings targeted for the car is strongly suggested (see section: Introduction, pg. 129; section 7-8, pg. 133-134). Geographical requirements such as destination country where the automobile is to be delivered is further mentioned in APA (see Specifications: pg. 2; top para pg. 3) according to

Art Unit: 2193

which Simulink (such as taught by Hanselmann) can support modeling and testing of manufactured engine destined for Japan, US or Europe. Based on the above teaching implied by the regulations considered in car making in regard to a geographical location target, it would have been obvious for one of ordinary skill in the art at the time the invention was made to implement the requirements by Hanselmann so that selection information includes information about a destination country in association with the code generating based on Hanselmann's Total Development Environment tool because this knowledge of the target country would dictate the regulations information specific to the code needed to implement appropriate automobile functionality in that respect and successfully select and validate the parameters implicated by the requirements for such country (see APA) based upon the above automotive regulations.

As per claim 8, Hanselmann discloses a computer program product on a computer readable medium for use in a code generation apparatus to generate a source code using a model containing at least two specific parts, the computer program product comprising instructions for:

acquiring the model containing the specific parts, each specific part being specified by a part specifier (refer to claim 1);

acquiring selected information, from a source external to the code generation apparatus, indicating selection of a specific part among the specific parts using a part specifier corresponding to the specific part among the specific parts (refer to claim 1);

generating the source code from an intermediate certain model, which is generated from the acquired model based on the acquired selection information (refer to claim 1), the intermediate model containing only a selected specific part selected from the specific parts and not containing any other specific part other than the selected specific part; and

Art Unit: 2193

storing the generated source code in a machine readable storage medium(refer to claim

1).

Hanselmann does not explicitly disclose acquiring selection information from a source external to the code generation apparatus, so that the intermediate model is generated from the model acquisition means based on the acquired selection information, the intermediate model containing a selected specific part and not parts other than said selected part.

However, the above limitation has been rendered obvious in claim 1.

As per claim 9, Hanselmann discloses a simulation apparatus for executing functions included in an intermediate model generated from a model containing at least two specific parts, the apparatus comprising:

model acquisition means for acquiring the model containing the specific parts (refer to claim 1);

information acquisition means, information from a source external to the code generation apparatus (refer to claim 1) indicating selection of a specific part among the specific parts using a part specifier corresponding to the specific part among the specific parts (refer to claim 1)

deletion and generation means for executing the functions included in the intermediate model, which is generated from the model acquired by the model acquisition means based on the information acquired by the information acquisition means, the intermediate model (refer to claim 1) containing only a selected specific part selected from the specific parts and not containing any other specific part other than the selected specific part; and

a machine readable storage medium for storing (e.g. preliminary control design...

SIMULINK block, step 4, pg. 129, R -- Note: preliminary Simulink prototype block for

Art Unit: 2193

specifying parts reads on intermediate model being stored for further modifying and testing – pg. 130, bottom L col. to top R col.) the generated intermediate model.

Hanselmann does not explicitly disclose selection information acquisition means for acquiring selection information, from a source external to the simulation apparatus, so that the intermediate model is generated from the model acquisition means based on the selection information acquired by said selection information means such that the intermediate model would contain a selected specific part based on that said selection information and not parts other than said selected part.

But this 'selection information' based on which to implement specific selection of a specific part of the intermediate model has been addressed in claim 1.

As per claim 10, Hanselmann discloses a computer program product on a computer readable medium for use in a simulation apparatus for executing functions included in an intermediate model (refer below) generated from a model containing at least two specific parts (refer to claim 1), the computer program product comprising instructions of:

acquiring the model containing the specific parts;

acquiring information from a source external to the simulation apparatus (refer to claim

1), capable of indicating selection of a specific part among the specific parts using a part

specifier corresponding to the specific part among the specific parts; and

executing the functions (Fig. 2, 5; preliminary control design... SIMULINK block, step 4, pg. 129, R -- Note: preliminary Simulink prototype block for specifying parts reads on executin the Simulink intermediate model with further modifying and testing – pg. 130, bottom L col. to top R col.) included in the intermediate model, which is generated from the acquired model

Art Unit: 2193

based on the acquired selection information, the intermediate model containing (refer to claim 1) only a selected specific part selected from the specific parts and not containing any other specific part other than the selected specific part.

Hanselmann does not explicitly disclose selection information from a source external to the code generation apparatus, so that the intermediate model is generated from the model acquisition means based on the acquired selection information, the intermediate model containing a selected specific part and not parts other than said selected part.

However, the above limitation has been rendered obvious in claim 1.

As per claim 11, Hanselmann discloses a model generation apparatus to generate an intermediate model from a model containing at least two specific parts, the apparatus comprising:

model acquisition means for acquiring the model containing the specific parts (refer to claim 1):

information acquisition means for acquiring selected information from a source external to the model generation apparatus, capable of indicating selection of a specific part among the specific parts using a part specifier (refer claim 1) corresponding to the specific part among the specific parts; and

deletion and generation means for generating the intermediate model, which is generated from the model (refer to claim 1) acquired by the model acquisition means based on the selected information acquired by the information acquisition means, the intermediate model (refer to claim 1) containing only a selected specific part selected from the specific parts-and not containing only other specific parts other than the selected specific part; and

Art Unit: 2193

a machine readable storage medium for storing the generated model (refer to claim 9).

Hanselmann does not explicitly disclose selection information acquired by a selection information acquisition means, from a source external to the model generation apparatus, so that the intermediate model is generated from the model acquisition means based on the acquired selection information, the intermediate model containing a selected specific part and not parts other than said selected part.

However, the above limitation has been rendered obvious in claim 1.

As per claim 12, Hanselmann discloses a computer program product on a computer readable medium for use in a model generation apparatus (refer to claim 1) to generate an intermediate model (refer below) from a model containing at least two specific parts, the computer program product comprising instructions for:

acquiring the model containing the specific parts (refer to claim 1);

acquiring selected information, from a source external to the code generation apparatus, information indicating selection of a specific part among the specific parts using a part specific corresponding to the specific part among the specific parts (refer to claim 1); and

generating the intermediate model from the acquired model based on the acquired selected information, the intermediate model (refer to claim 1) containing only a selected specific part selected from the specific parts-and not containing only other specific parts other than the selected specific part (refer to claim 1).

Hanselmann does not explicitly disclose acquiring selection information from a source external to the code generation apparatus, so that the intermediate model is generated from the

Art Unit: 2193

model acquisition means based on the acquired selection information, the intermediate model containing a selected specific part and not parts other than said selected part.

But this 'acquiring selection information' limitation has been addressed in claim 8 or 1.

As per claim 13, Hanselmann discloses a method in a code generation apparatus to generate a source code using a model containing at least two specific parts, the method comprising steps of:

acquiring the model containing the specific parts (refer to claim 1);

acquiring selected information from a source external to the code generation apparatus, indicating selection of a specific part among the specific parts using a part specifier corresponding to the specific part among the specific parts (refer to claim 1); and

generating the source code from an intermediate model, which is generated using the acquired model based on the acquired selected information, the intermediate model containing only covering a selected specific part selected from the specific parts and not containing any other specific part other than the selected specific part (refer to claim 1).

Hanselmann does not explicitly disclose acquiring selection information from a source external to the code generation apparatus, so that the intermediate model is generated from the model acquisition means based on the acquired selection information, the intermediate model containing a selected specific part and not parts other than said selected part.

But this 'acquiring selection information' limitation has been addressed in claim 8 or 1.

As per claim 14, Hanselmann discloses a code generation apparatus to generate a source code using a model containing at least two specific parts covering, the apparatus comprising: model acquisition means for acquiring the model containing the specific parts;

Art Unit: 2193

selection information ... indicating selection of a specific part among the specific parts using a part specific corresponding to the specific part among the specific parts;

deletion and generation means for ... other than the selected specific part; and a machine readable storage medium for storing ... generated source code; all of which limitations have been addressed in claim 1, including the obviousness rationale to address the 'acquiring selection information' limitation.

As per claims 15, 16, and 19, based on the model and the industrial applicability of Simulink (e.g. automobile industry via Fig. 1, 2, pg. 129-130; Introduction, pg. 129; Fig. 4-5, pg. 131-132), Hanselmann does disclose wherein the are functions exclusive to each other in the generated certain model; wherein the of the family are types different from each other; wherein the are intended uses which are different from each other (Note: a Simulink model when implemented in a industrial application inherently include specific intended use per model—like ECU for each car model, applying to different type of industrial applications, wherein each application being modeled and implemented comprise functions exclusive to the model made for the a build or prototyping).

As per claims 23, 27, 31, 35, 39, 43 and 47, refer to claim 19.

As per claims 17-18, 20, Hanselmann does not explicitly disclose wherein the of the family are types of engines; but based on the rationale as set forth for addressing the *intended use* and *specific type* using Hanselman's automotive application in addressing claims 16, 19 from above in light of APA, the above limitations would also have been obvious because each country for which Hanselmann's car model is intended for would have regulations or domestic laws

Art Unit: 2193

specific for such country and a targeted car model for that country has to be modeled compliant to a given engine type to suit that country's environment and laws, as set forth in claim 6.

As per claims 21, 22, 24, refer to rationale as set forth in claims 17-18, 20.

As per claims 25, 26, 28, refer to claims 17-18, 20.

As per claims 29, 30, 32, refer to claims 17-18, 20.

As per claims 33, 34, 36, refer to claims 17-18, 20

As per claims 37, 38, 40, refer to claims 17-18, 20.

As per claims 41, 42, 44, refer to claims 17-18, 20.

As per claims 45, 46, 48, refer to claims 17-18, 20.

As per claim 49, Hanselmann discloses wherein the system relates to a vehicle; but does not explicitly disclose that the specific parts individually correspond to of engine types of the vehicle. But the engine related parts fall under the subject matter of claim 17, hence would have been obvious as set forth therein.

As per claim 50, Hanselmann discloses a code generation apparatus for generating partspecific source code for compiling into a part-specific executable program, the part-specific
executable program for executing on a target electronic control unit (ECU) associated with a
vehicle system (Fig. 2, 4, 5; *Toyota ECU commercial microcontroller* – section 3, The Virtual
ECU, pg. 131) the target ECU for operating a specific part using the part-specific executable
program, the apparatus comprising:

model acquisition means for acquiring a combined model (refer to claim 1) containing information for generating source code associated with a plurality of parts, each of which is capable of being selected as the specific part in the vehicle system (e.g. Step 1: m-file format ...

Art Unit: 2193

block-diagram format - pg. 129, R col.; Fig. 4-5 – Note: theoretical model as input with block-diagram format describing ECU reads on a combined model having specific parts represented as block diagram or Matlab files therefor – see *Toyota, injector, crankshaft, actuators* – L col. middle, pg. 131);

information acquisition means for acquiring information, from a source external to the simulation apparatus capable of selection of a specific part among specific parts using a corresponding part specifier (refer to claim 1);

searching means for searching the combined model containing the information for generating source code associated with the plurality of parts to find part-specific information (steps 4-5, 6 – pg 129 R col to pg. 130) for generating the part-specific source code (RCP Tools, pg. 132, L col) associated with the specific part matching the selection information acquired by the selection information acquisition means:

intermediate model generation means for deleting portions (step 4: drag-and-drop, pg. 129, Fig. 2; drag-and-dropped onto the window - pg 132, 2nd para, R col – Note: inputting via user's mouse drag/drop and text specifications and libraries reads on deleting to yield a intermediate type model for enabling to simulation code generation – Figure 1; steps 6-8, pg. 129-130) of the information for generating source code associated with the plurality of parts from the combined model to form

an intermediate model (refer to claim 1), the intermediate model containing only information for generating the part-specific source code; and

generation means for generating the part-specific source code from the information for generating the part-specific source code contained in the intermediate model (refer to claim 1). Hanselmann does not explicitly disclose selection information acquisition means for acquiring selection information, from a source external to the simulation apparatus, so that the intermediate model is generated from the model acquisition means based on the selection information acquired by said selection information means such that the intermediate model would contain a selected specific part based on that said selection information and not parts other than said selected part.

But this limitation has been addressed in claim 1.

As per claim 51, refer to claim 17 for engine types of the vehicle system.

As per claim 52, Hanselmann discloses wherein each of the at least two specific parts of the model is specified by a corresponding part specifier (refer to claim 50), the deletion-and-generation means deleting the specifier of the selected specific part (Note: refer to the USC 112 1st paragraph Rejection, i.e. no weight is given to deleting a specifier of a part; refer to claim 1: selecting parts in the framework to retain only selected items to instantiate the prototype of Fig. 2) so that the intermediate model does not contain the specifier of the selected specific part.

As per claims 53-60, refer to claim 52.

Response to Arguments

6. Applicant's arguments filed 7/18/08 have been fully considered but they are not moot in view of the new grounds of rejection which has been necessitated by the Amendments; i.e. how the amendment has affected the scope and interpretation of the claims has been the result as set forth in the readiusted grounds of rejection.

Conclusion

Art Unit: 2193

 THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571)272-3759.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Application/Control Number: 10/761,207 Page 20

Art Unit: 2193

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan A Vu/

Primary Examiner, Art Unit 2193

September 21, 2008